

Table 9
Central Yard Summary of Contaminated Media Areas and Volumes
Chevron Perth Amboy Refinery
Perth Amboy, New Jersey

Media	Contaminants / Areas	Area (SY)	Volume (CY)	Impacted SWMUs / AOCs
Hazardous Soil	TCLP Benzene > 0.5 mg/L	0	0	
	TCLP Lead > 5 mg/L	1,469	1,219	SWMU: 34
	Total	1,469	1,219	
Non-Hazardous Soil	Lead > 800 mg/kg	1,220	2,233	SWMUs: 12 and 34
	Benzene > 100 mg/kg	0	0	
	Benzene 13 - 100 mg/kg	75	63	AOC: 22
	Total	1,295	2,296	
Benzo(a)pyrene > 10 mg/kg Impacted Soil	Benzo(a)pyrene > 10 mg/kg	50	50	SWMUs: 15 and 34; AOC: 16
Groundwater	Benzene 1 - 100 ug/L	34,798	111,354	SWMUs: 15 and 34; AOCs: 16, 22 and 25
	Benzene > 100 ug/L	472	1,510	AOCs: 16 and 22
	Lead 5 - 50 ug/L	1,710	5,472	SWMU: 34
	Lead > 50 ug/L	184	589	SWMU: 34
	Total	37,164	118,925	

Notes:

1. SY = Square Yard
2. CY = Cubic Yard
3. SWMU = Solid Waste Management Unit
4. AOC = Area of Concern
5. The estimated areas and volumes of contaminated soil were based on the soil principal contaminants of concern (PCOCs) distributions presented in the CM: Pre-Design Investigation (PDI) Results Report. This Report includes historical and RFI soil data, as well as SRFI and CMS soil data
6. The unconfined saturated zone thickness of each yard used to calculate the volume of groundwater to be managed was estimated to be 9.6 ft based on the boring log observances and cross-sections shown in the CMS PDI Work Plan figures.
7. The SWMUs and AOCs impacted by soil and groundwater PCOCs were identified based on their overlapping with the corresponding PCOC contours presented in Figures 2 through 4 of the CMS Final Report
8. The PCOCs were contoured from their applicable regulatory standard or criteria as follows: 1) benzene was contoured from 13 mg/Kg, its NJDEP Non-Residential Direct Contact Soil Cleanup Criteria (NRDSCC); 2) lead was contoured from 800 mg/Kg, its NJDEP Non-Residential Direct Contact Soil Cleanup Standard (NRDSCS); 3) arsenic was contoured from 20 mg/Kg, its NJDEP NRDSCC; 4) benzo(a)pyrene was contoured from 10mg/Kg, its CMS recommended action level for active remediation; 5) TCLP benzene was contoured from 0.5 mg/L, its RCRA Characteristic Hazardous Waste Regulatory Level; 6) TCLP lead was contoured from 5 mg/L, its RCRA Characteristic Hazardous Waste Regulatory Level; 7) benzene in groundwater was contoured from 1 ug/L, its NJDEP Groundwater Quality Standard (GWQS); and 8) lead in groundwater was contoured from 5 ug/L, its NJDEP GWQS